

IN THE CLAIMS

Claim 1-14 (canceled)

15. (new) A method of synthesizing of a speech signal using processing apparatus, comprising:

the apparatus automatically assigning of a first identifier to a first class of steady intervals of an original speech signal and assigning of a second identifier to a second class of dynamic intervals of the original speech signal,

the apparatus automatically windowing the original speech signal to provide a number of pitch bells,

the apparatus automatically processing the pitch bells having the first identifier assigned thereto for modifying a duration of the speech signal, and

the apparatus automatically performing an overlap and add operation on the processed pitch bells

outputting the overlapped and added pitch bells as a synthesized speech signal.

16. (new) The method of claim 15, wherein the first identifier is selected between a first code and a second code, the first code being indicative of an unvoiced interval and the second code being indicative of a voiced interval.

17. (new) The method of claim 15, whereby the second identifier is selected between a third code, a fourth code, a fifth code and a sixth code, the third code being indicative of an unvoiced interval being essential for the intelligibility of the speech signal, the fourth code being indicative of a voiced interval being essential for the intelligibility of the speech signal, and the fifth code being indicative of an unvoiced interval not being essential for the intelligibility of the speech signal and the sixth code being indicative of a voiced interval not being essential for the intelligibility of the speech signal.

18. (new) The method of claim 17 wherein pitch bells being assigned to the fifth or sixth code are at some times deleted and at other times not deleted.

19. (new) The speech signal of claim 15 wherein one or more pitch bells belonging to a dynamic voice or unvoiced interval have been deleted prior to the overlap and add operation.

20. (new) The method of claim 15 wherein a raised cosine is used for windowing of the speech signal.

21. (new) The method of claim 15, wherein a sine window is used for windowing of steady, unvoiced intervals of the speech signal.

22. (new) The methods of claim 15, comprising randomizing the pitch bells of steady, unvoiced periods before performing the overlap and add operation.

23. (new) The method of claim 15, wherein the windowing is performed by means of a logical window positioned synchronously with a fundamental frequency of the speech signal.

24. (new) Computer program product, the computer program product comprising program means for performing the following processing steps for the modification of a duration of an original speech signal:

    assigning of a first identifier to a first class of intervals of an original speech signal and

    assigning of a second identifier to a second class of intervals of the original speech signal,

    windowing the original speech signal to provide a number of pitch bells,

    processing the pitch bells having the first identifier assigned thereto for modifying a duration of the speech signal,

    performing an overlap and add operation on the processed pitch bells, and wherein

the computer program means being embodied in a computer readable physical medium for controlling the processing means of computing apparatus.

25. (new) A text-to-speech computer system, comprising:

means for storing of a speech signal,

means for storing of first identifiers being assigned to a first class of steady intervals of an original speech signal and for storing of a second identifiers being assigned to a second class of dynamic intervals of the original speech signal,

means for logically windowing the speech signal to provide a number of pitch bells,

means for processing the pitch bells having the first identifier assigned thereto for modifying a duration of the speech signal,

means for performing an overlap and add operation on the processed pitch bells,

means for outputting the overlapped and added pitch bells as a synthesized speech signal.

26. (new) The speech signal of claim 25 wherein one or more pitch bells belonging to a dynamic voice or unvoiced interval have been deleted prior to the overlap and add operation.

27. (new) A synthesized speech signal output by the method of claim 15, and embodied as physical variations of properties of a computer detectable media.

28. (new) A synthesized speech signal output by the text-to-speech system of claim 25, and embodied as physical variations of properties of a computer detectable media.

29. (new) The synthesized speech signal of claim 28 wherein the media is a computer memory in which the synthesized speech signal is stored.